

MATERIALS AND METHODS FOR FREEFORM FABRICATION OF
SOLID THREE-DIMENSIONAL OBJECTS USING FUSIBLE, WATER-
CONTAINING SUPPORT MATERIALS

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ABSTRACT OF THE DISCLOSURE

Materials and methods for freeform fabrication of a solid three-dimensional object are provided. At least one layer of support material and at least one layer of build material are dispensed onto a substrate. The support material includes at least one of water and a fusible water-containing substance, and the build material is a substance other than water or a fusible, water-containing substance. After solidification, the at least one layer of support material is removed by an automated or manual process which includes washing with water at ambient temperature and/or causing the support material to undergo a phase change, to produce the solid three-dimensional object.

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